

Gas Drilling in the Southern Tier: As Greed Sets In, Who Will Speak for God's Creation?

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Our Presbytery [*Ed. Note: a seven county district of the Presbyterian Church USA*] lies over an extremely large natural gas reservoir called the Marcellus Shale Formation. It is about 54,000 square miles in area, and may contain ten times as much natural gas as the current largest U.S. field, the Barnett Shale Formation in Texas.

Recent technological developments have now made this deposit accessible. This technology involves standard downward drilling, then horizontal "drilling" using high-pressure corrosive fluids to fracture the rock. This proprietary fluid and equipment is leased from Halliburton Energy Services (Dubai). This technology recently received a special exemption from the Clean Air and Clean Water Acts by Vice President Cheney's Energy Act of 2005.

Numerous exploration and production companies are actively leasing land for drilling and have drilled more than 100 wells (mostly in PA thus far). They are known (public data from investors' conferences) to be very productive and are nearly 100% successful. The geology is clear that the Marcellus Shale Formation in NYS holds large amounts of high quality gas in fairly close proximity to storage areas, major transmission lines, and large energy markets making this deposit especially valuable.

With the current high cost of energy, the relatively low reported cost of production, and the continuing rise in world energy demand, we can safely conclude that pressure will mount for drilling and production in central NY. Leasing payments can vary from \$25 to \$10,000 per acre plus a 12 % to 87%* royalty fee all dependent on the savviness and negotiating skills of the land owner and/or their agent. All this will profoundly change our area both in terms of monetary wealth and a corresponding impact to the environment.

The wealth from gas drilling is transitory wealth of relatively short duration as opposed the ecological wealth of the area. This long term, sustainable wealth, which includes our water supplies will definitely be diminished, with consequences that will last long after the gas deposits have been depleted. There are immediate environmental consequences as well.

Drilling sites are typically placed on 2 to 5 acre flattened clearings. The site includes the drill equipment itself, support equipment, and a 400 by 400 foot evaporation pond to hold the drilling "mud" of devolved stone and solvents. This does not include the "temporary" roads necessary to access the site. Each site will consume at least a million gallons of water and solvents and require generators producing piercing noise at 83 decibels (a subway train in a tunnel at 200 feet) around the clock. The gas field may require at least one of these sites for every 1/4 square miles. A number of compressor stations will have to be developed as well to ready the gas for transport. Existing small rural roads and bridges will bear far greater traffic then they were designed for.

In addition to the physical destruction of the sites and the land necessary to access these sites, air pollution will take the form of dust from the dirt roads, fumes from both truck traffic and generators, as well as the evaporation of the hydrocarbons from the ponds. Some environmentalists claim that the new, cleaner fuel will replace older, dirtier forms of fossil fuel (actually helping address global climate change), but if the past

is any indication, this new source of fossil fuel will only serve as an addition to, not a substitution for, current fossil fuel sources, thus exacerbating rather than alleviating the problem.

Ground pollution is also a concern. Leaks from improperly sealed evaporation ponds is but one concern. The hydraulic fracturing process ("fracking") involves injecting large volumes of corrosive fluid under considerable pressure into the well bore. This breaks open the shale formation to allow the natural gas to migrate to the bore hole and thus be captured. There is a potential of leaks from the bore itself as well as inadvertent cracks disturbing the integrity of the earth formations themselves. Either can lead to contamination of the water table and/or the more recently discovered ground pollution of the type experienced in Endicott, NY where fugitive gas seeps through the ground itself and into the basements of homes.

The wealth in terms of dollars will be hard to resist and equally difficult to determine. The energy companies themselves will maneuver to capture as much wealth as they can (they still make money paying 87% royalty fees). A certain portion of our communities are owned by absentee landlords who might care little about the destruction of the landscape. Some local landowners might elect to strike their deals and leave the area. Other owners may stay, but elect to invest their new found riches elsewhere. This type of wealth tends to be very mobile. What wealth actually stays in the community would be very difficult to determine.

How will the Church respond? Where do our riches really lie? The allure of material riches has been difficult for the Church to counter. Materialism is rampant, especially in the US. Only recently has the Church seen its role and found its voice as an advocate for God's creation. What better place than the Church to point out the dilemma of quick material gain versus environmental damage? How the Church responds to this issue will reflect on its integrity and credibility, yet given the enormity of the issue for our Presbytery, silence would be very telling indeed.

*The higher royalty payments are generally achieved in states where the government owns the underground resources, but demonstrates how little margin the companies really need to make money.

ADDITIONAL RESOURCES: Natural Gas Drilling Impact

<http://www.youtube.com/GasDrillingTruth>

<http://www.youtube.com/watch?v=Rg3ZJ9Hp56w&feature=related> Impact on Land

<http://www.youtube.com/watch?v=sYEhhHJJt-o&NR=1> Gas Drilling and Streams

<http://www.youtube.com/watch?v=jHFD3jOTEuY&feature=related> Smell & Noise

<http://www.youtube.com/watch?v=pVNgwMGEObE&feature=related> Part 1

A primer for public servants and residents of counties that care for their lifestyles. The impacts of natural gas development on communities, environment, and public health.

<http://www.youtube.com/watch?v=Uoi1nNBUHuo&feature=related> Part 2

Lives and land undergo critical changes as water and land are contaminated.

<http://www.youtube.com/watch?v=s4o6XREKko4&feature=related> Part 3

The gas patch, with in depth interviews from residents to county officials. The truth about a virtually unregulated industry and how it has ruined communities throughout most of the West.

<http://www.youtube.com/watch?v=d0qorDa541M&feature=related> Part 4

Want to know how your natural gas is extracted from the earth? Want to know what the price is to your fellow Americans. Educate yourself and your community members.

<http://www.youtube.com/watch?v=xBIJgmxUI90&feature=related> Part 5

County officials take note of the impacts to your communities. Be prepared before the onslaught.

<http://www.youtube.com/watch?v=89tlcJLJpvg&feature=related> Part 6

Rural Impact is available for purchase. The DVD has EXTRA's. Data and documents to help understand the problems. Contact the San Luis Valley Citizens Alliance for more information and updates.

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